SyQuest®

SCSI SOFTWARE

INSTALLATION GUIDE

SCSI Software Installation Guide (Internal and External Drives & External Parallel Port Subsystems)

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Chapter 1 • Introduction

Overview

This manual describes the software that installs and supports SyQuest SCSI (Small Computer System Interface) drives (SQ555, SQ5110 and SQ5200 - 5.25 inch Drives and SQ3105 and SQ3270 - 3.5 inch Drives), SyQuest supported SCSI adapters (Adaptec 1515, 152X, 154X Series Adapters and Seagate ST01 Adapter) and SyQuest Parallel Port to SCSI products (SyQuest Enhanced Parallel Port Kit, SyDOS Parallel Adapter Kit, SyDOS PUMA 44 and SyDOS PUMA 88 Drives).

All software is distributed on a 3.5 inch diskette - SyQuest SCSI Utility Diskette.

The SyQuest SCSI Utility Diskette installs a DOS full screen character menu that supports preparing, backing up/restoring and unlocking SyQuest cartridges. If Windows™ is detected on the computer, the diskette can set up a graphical, icon based Windows interface for preparing, backing up/restoring and unlocking SyQuest cartridges. Also, found on this diskette are OS/2 and Windows NT software drivers for selected Host Bus Adapters.

Shipped with your SyQuest hardware were manuals that describe hardware setup procedures. You must set up the hardware prior to installing the software. If you have not yet done so, complete hardware setup now.

Should you require copies of the software on 5.25 inch media, you are authorized to make one copy of the diskette on 5.25 inch media. Or you may complete the Product Registration Card and note that you need a copy of the software on a 5.25 inch diskette. Or you may call SyQuest at:

Within US	1 (800) 249-2440
Outside US	(510) 226-4000
FAX	(510) 226-4102
BBS	(510) 656-0473
Europe	49-751-560-500
FAX	49-751-553-075
BBS	32-11-683-525
ASIA	66-2-583-5490
FAX	66-2-583-5500

The Bulletin Boards are available seven days a week, twenty four hours per day. Data rates supported are 300 Bits/Second to 14.4K Bits/Second. Use 8 data bits, 1 stop bit and no parity.

Notice to Users

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While every effort has been made to ensure that the information provided herein is correct, please notify SyQuest in the event of any errors. Please write your comments, your name, address and telephone number (include the name and the part number of the document) and mail to:

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Chapter 2 • DOS Support

Overview

SyQuest DOS SCSI software allows you to remove and exchange cartridges on SyQuest drives while your computer is active. The DOS software recognizes and exchanges cartridges prepared on other DOS systems (FAT format), OS/2 systems (FAT format), and Windows NT systems (FAT format).

The software described in this chapter works with MS-DOS™ 3.1 or higher, PC-DOS™ 3.1 or higher and DR-DOS™ 6.0 or higher (Some restrictions may apply to DR-DOS). The Readme file on the SyQuest SCSI Utility Diskette provides additional information about the software.

DOS Installation Utility

The SyQuest SCSI Utility Diskette supports installing SyQuest SCSI drives as primary or secondary drives, and upgrading systems to the latest level SyQuest software.

The installation utility copies all the SyQuest DOS Utility software from the installation diskette to another disk (normally your C: drive) or diskette drive.

DOS installation supports two options; (1) default and (2) customized. The default option installs the software with all SyQuest recommended options. The customized option tailors the software to meet unique requirements.

The "Customized" option provides three options that you may use to tune the installation to meet the requirements of your particular system.

1. Selecting Auto Lock or No Auto Lock - SyQuest software always LOCKs drives whenever your computer is in Windows enhanced mode. The Auto Lock options sets all SyQuest SCSI drives in a software "LOCKed" state when your computer boots and whenever the drive is accessed. No Auto Lock disables software LOCKing while in DOS real mode or Windows real mode. When in a "LOCKed" state, depressing the Eject Button has no effect - the cartridge will not eject. To eject a cartridge, you must send a software "UNLOCK" command (Use SQSHELL "Unlock SyQuest Drives" menu item or the "Unlock SyQuest Drives" icon) and then depress the Eject Button.

2. Selecting the Installation Directory - The default directory is C:\SYQUEST. By backspacing over this name, you can install the software on any drive and create any valid DOS directory name.

3. Selecting the number of DOS volumes to reserve - If you boot without a cartridge in the drive, this option tells the operating system to reserve the specified number of DOS volume letters for the drive/cartridge. (When booting with a cartridge in the SyQuest drive, the software automatically reserves the number of DOS FAT (File Allocation Table) partitions detected on the cartridge.)

   To install a SyQuest SCSI Removable Cartridge Disk Drive as the Boot (C:) Drive:

C: Drive Installation

1. Enable BIOS for your SCSI Adapter and set the BIOS address on the adapter to a unique address. (Enter the command "**SQPREP /B**" from the DOS A:> (or DOS B:>) prompt with "SyQuest SCSI Utility Diskette 1" inserted in the A: (or B:) drive to obtain a map of unused BIOS addresses for your computer).

2. Set the Hardfile Device C: type to "NOT INSTALLED" under the CMOS setup program (or equivalent state for computers using Hardware Setup Diskettes).

3. Boot your computer with a DOS installation diskette in the A: diskette drive. Complete the installation of DOS and reboot your computer.

4. Insert the SyQuest SCSI Utility Diskette in a diskette drive.
5. Run the SyQuest DOS Installation Utility.

NOTE: SyQuest drives attached to Parallel Port Adapter kits can not be installed as the boot drive.

To run the DOS installation utility: (1) If running under Windows, exit to DOS. (2) Insert the SyQuest SCSI Utility Diskette into either the **A:** (or **B:**) diskette drive. (3) Type **A:** (or **B:**) and press the **ENTER** key. (4) From the DOS prompt, type **Install** and press the **ENTER** key.

Install supports the installation of SyQuest SCSI drives attached to SCSI adapters and/or attached to parallel ports. Since it is possible to have SyQuest drives attached to both a parallel port and a SCSI adapter on the same computer, **Install** allows the selection of both options.

A full screen installation menu containing help messages displays. Select the default option if you are unsure of which option to choose. The utility may be exited at any time by depressing the **CTRL** and **X** keys simultaneously. Depressing the **Esc** key generally returns to the previous screen.

When prompted by **Install** to select the type of SCSI adapter, select:

Adaptec 1515 or 1520 Series	if using an Adaptec 1515 or 152X Adapter (SyQuest 16-Bit Adapter).
Other SCSI Adapters	if using a Seagate ST01 Adapter, an Adaptec 154X with SyQuest BIOS enabled or if you are *upgrading* or installing SyQuest software with any other SCSI Adapter.

When prompted by **Install** to select the type of Parallel Port adapter, select:

SyQuest EPP Parallel Port	if using a SyQuest Enhanced Parallel Port Adapter Kit
SyDOS Parallel Port	if using a SyDOS PUMA 44, PUMA 88 or SyDOS Parallel Port Adapter Kit

After running the SyQuest DOS installation program, your PC must be rebooted for the newly installed software to be recognized by the system. Enter "**SQSHELL**" to prepare (partition and format) SyQuest cartridges.

You must use "Format SyQuest Cartridge-SCSI" to prepare a cartridge before it can be used for data storage.

SyQuest DOS Shell

The SyQuest DOS Shell (SQSHELL) provides a full screen menu for calling SyQuest software utilities. After installing the DOS software and rebooting your computer, typing **SQSHELL** from the DOS prompt calls the SyQuest Shell (menu). Use the up/down arrow key to select (highlight) the menu item and depress the **Enter** key to execute the menu item. Depressing the **F1** key displays a "help" screen that describes the menu function. Depressing the **F3** key exits the menu.

SyQuest software fully supports removability (knows whenever a SyQuest cartridge is removed from the drive). To insure that removability and SyQuest cartridge interchange are fully supported, **always** use the "Format SyQuest Cartridge-SCSI" utility to partition ("FDISK") cartridges. Once a cartridge has been prepared for use by DOS, all DOS disk utilities (except "FDISK") may be used.

To prepare a cartridge, use the up and down **Arrow** keys to select the "Format SyQuest Cartridge-SCSI" menu item and press the **Enter** key. The utility looks for all SyQuest SCSI drives and allows you to choose the appropriate drive. Once you have selected a drive, the utility asks you to verify that the activity LED (Light Emitting Diode) for the drive is amber. This insures that you have selected the correct drive. For a first time preparation of a cartridge, select the "Partition/Format Cartridge for DOS" option. Select "Automatic DOS Preparation" to use SyQuest recommended options to create and format bootable partition(s). Select "Custom DOS Partitions" to interactively define and prepare partitions within a cartridge based on your input.

The "SyQuest Back-Up Copy" menu provides a simple way of copying (backing up and restoring) data to and from disks and SyQuest cartridges (including a cartridge to cartridge backup). Enter the path of the files that you wish to copy and the destination path. The utility prompts you if additional cartridges are needed.

The "Unlock SyQuest Drives" provides a simple way to "UNLOCK" SyQuest drives that have been software locked. SyQuest software automatically "LOCKs" all drives operating in **Windows** Enhanced mode. The default installation mode is set to Auto Lock if Windows is detected in your AUTOEXEC.BAT path statement. To change a SyQuest cartridge containing Windows system files, you should always completely exit Windows. Use the "Unlock SyQuest Drives" SQSHELL menu to "UNLOCK" the cartridge. As a short cut you may type "UNLOCK" from a DOS prompt. The SyQuest cartridge can then be safely removed and interchanged with another cartridge.

The "SyQuest Options" menu item supports the following functions: (1) "Safe Scan" (MS-DOS 6.2X and up only), (2) "Fixed Drive Utility," (3) "Removable Drive Utility," and (4) "Lock Utility."

The "Safe Scan" menu item calls the MS-DOS 6.2X command SCANDISK. This function provides a very powerful and safe way of restoring data from damaged disks. This function will only work if MS-DOS 6.2 SCANDISK is installed in your computer.

"Fixed Drive Utility" and "Removable Drive Utility" tell the software whether the cartridge should be treated as a fixed drive (a drive that never checks for removal of a cartridge) or a removable drive (a drive that always checks for removal of a cartridge). Some software applications require that they be installed only on a fixed drive. Use this utility to set the drive as "fixed" for these applications. Use the "Removable Drive Utility" to set the drive as removable.

Use the "Lock Utility" to set a software "LOCK" on a drive if the "No Auto Lock" option was selected during install. Once a "LOCK" is issued, pressing the Eject Button on the drive is ignored until a software "UNLOCK" command is issued. By issuing these commands, users/programs can insure that cartridges are not removed before all the data are written onto the cartridge. The default installation mode is "No Auto Lock". Use the "Unlock SyQuest Drives" SQSHELL menu item to UNLOCK the cartridge.

Chapter 3 • SyQuest Windows Utility

Setup Overview

SyQuest Software sets up a Windows icon based, graphical user interface for supporting SyQuest drives. You must have Windows 3.0 or higher installed on your system. SyQuest's Windows setup utility is contained on SyQuest SCSI Utility Diskette. You **must** install SyQuest DOS Software before you can setup SyQuest Windows Software. If Windows is detected on your system during DOS install (Windows is found on a directory in the AUTOEXEC.BAT Path statement), DOS **Install** will setup the Windows Software.

If you setup SyQuest Windows Software during DOS Install, you may skip this section.

The following discussion assumes that you did **not** setup your SyQuest Windows Software during DOS installation. You **must** complete a DOS Software **Install** and have rebooted your system prior to doing any of the following:

To setup the SyQuest Windows Utility software, do the following:

1. Insert SyQuest SCSI Utility Diskette 1 in the A: (or B:) diskette drive.

2. Do either of the following:

   Type "WIN A:SETUP" at the DOS prompt and continue to Step 3.

   OR

   From within the Windows under the Program Manager select "Run..." under the "File" pull down menu. At Run's dialog box, type in "A:SETUP" (or "B:SETUP") in the "Command Line:" box and then click the "OK" button.

3. An "Installation Greeting" dialog box displays. Click "Continue" to start the installation.

4. The SyQuest Utility Group is created and the following icons are installed: (1) Unlock SyQuest Drive, (2) Format SyQuest Cartridge, (3) About SyQuest Utilities, (4) SyQuest Readme SCSI, (5) SyQuest Back-Up Copy Utility, and (6) SyQuest Options.

   If this is a first time setup of a SyQuest drive, you will need to exit Windows and reboot the system for the new code to be recognized by the system.

You must use the "Format SyQuest Cartridge" icon to prepare (partition and format) a cartridge before it can be use for data storage.

SyQuest Utility Group

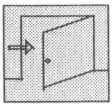
SyQuest ReadMe SCSI V-3.X

SyQuest Windows Setup program creates the SyQuest Utility Group and several icons. Double clicking a mouse while the mouse cursor is on a SyQuest icon launches the SyQuest utility program. The latest level documentation about the shipped SCSI software is contained in the SyQuest Readme SCSI icon. Double click on this icon to either browse or "print" additional information about SyQuest software.

Format SyQuest Cartridge

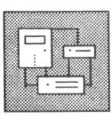
SyQuest software fully supports removability (knows whenever a SyQuest cartridge is removed from a drive). Selecting the "Format SyQuest Cartridge" icon uses SyQuest software to prepare cartridges so that removability is fully supported. Always use this icon to prepare (partition and format) your SyQuest cartridge. Once a cartridge has been defined to the system, all DOS disk utilities (except "FDISK") may be used.

To prepare a cartridge, double click on the "Format SyQuest Cartridge" icon. This launches a DOS utility that looks for all SyQuest SCSI drives and allows you to choose the appropriate drive. Once you have selected a drive, the utility asks you to verify that the activity LED (Light Emitting Diode) for the drive is ON. This insures that you have selected the correct drive. For a first time preparation of a cartridge, select the "Partition/ Format Cartridge for DOS" option. Select "Automatic DOS Preparation" to use SyQuest recommended options to create and format a bootable partition. Select "Custom DOS Partitions" to interactively define and prepare partitions within a cartridge based on your input.



Unlock SyQuest Drives

Use the "Unlock SyQuest Drive" icon to send a software UNLOCK command to a SyQuest drive. SyQuest software automatically LOCKs SyQuest drives while your computer is in Windows Enhanced mode. While the drive is software locked, depressing the Eject Button on the SyQuest drive is ignored. Only when a software UNLOCK command is issued does the drive respond to the Eject Button. Use the "Unlock SyQuest Drive" icon to send a software UNLOCK command to a SyQuest drive. SyQuest **strongly recommends** that prior to removing any cartridge containing Windows systems files, you completely exit Windows and use the DOS SQSHELL Unlock menu item to send a software UNLOCK command to the SyQuest drive. This insures that all open files are closed and written to the cartridge prior to removing a cartridge. As a short cut, you may type "UNLOCK" from a DOS prompt.



SyQuest Backup Copy Utility

The "SyQuest Back-Up Copy Utility" icon calls a DOS character program that copies (backs up or restores) files to and from disks and SyQuest cartridges. Enter the path of the files that you wish to copy and the destination path. The utility prompts you if additional cartridges are needed.

SyQuest Options

The "SyQuest Options" icon calls four subfunctions. They are: "Fixed Drive Utility," (2) "Removable Drive Utility," (3) "Lock Drive Utility" and (4) Safe Scan Utilitiy.

The "Lock Drive Utility" option can be used to immediately software "LOCK" a drive. Use the "Unlock SyQuest Drive" to issue a software "UNLOCK" command. Once a "LOCK" has been sent to the SyQuest drive, pressing the Eject Button on the drive is ignored until an "UNLOCK" command is sent. Use these icons to prevent accidental removal of a cartridge until all data are written to the cartridge.

"Fixed Drive Utility" and "Removable Drive Utility" options tell the system software whether the cartridge should be treated as a fixed drive (a drive that never checks for removal of a cartridge) or as a removable drive (a drive that always checks for removal of a cartridge). Some applications require that they be installed only on a fixed drive. Use this utility to set the drive as "fixed" for these applications.

The "Safe Scan Utility" option is installed only if your computer's Operating System is MS-DOS 6.2 or higher. This function provides a safe and powerful way of recovering and restoring data from damaged cartridges.

About SyQuest Utilities

"About SyQuest Utilities" describes software release version number, supported host adapters, systems compatibility and supported drives.

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Chapter 4 • OS/2

Overview

DOS requires that hard disks (including SyQuest removable cartridge disk drives) be partitioned (normally done by the DOS FDISK command). DOS hard disks may be partitioned into a single partition that includes the whole disk or into multiple partitions. OS/2 requires that removable media **not be partitioned**, (be formatted like a "floppy" diskette).

Prior to the release of SyQuest SCSI Software Version 3.12, cartridges prepared under OS/2 systems were not recognized on DOS systems and cartridges prepared under DOS could only be used as fixed hard drives on OS/2 systems. Release 3.12 contains software that supports the removal and interchange of: (1) OS/2 formatted cartridges on DOS systems and (2) DOS partitioned cartridges on OS/2 systems

OS/2 2.1x and OS/2 3 natively support SyQuest cartridges as high capacity, non-caching "floppy" diskettes. Cartridges can be removed and inserted whenever the drive is not reading or writing. These "floppy" formatted cartridges now freely interchange on DOS systems utilizing SyQuest SCSI Software Version 3.12 or higher (SQDRIVER.SYS Version 2.84 or higher) or SyQuest IDE Software Version 3.2 or higher (SQATDRVR.SYS Version 1.60 or higher).

The SyQuest SCSI Utility Diskette contains software that supports the removal and interchange of DOS File Allocation Table (FAT) formatted partitioned cartridges between OS/2 2.1x, OS/2 3 and/or DOS systems attached to SyQuest 16-Bit SCSI or Adaptec 152X/154X SCSI adapters. Also included, is software that allows SyQuest SCSI drives attached to a SyQuest Enhanced Parallel Port Adapter Kit to be supported as either OS/2 "floppy" removable cartridges or as removable partitioned FAT formatted cartridges.

Installing a SyQuest Supported SCSI Adapter

OS/2 **Selective Install** allows you to tailor specific features of the operating system. Once the initial system installation is completed, the system reboots and **Selective Install** starts. **Selective Install** may also be rerun from an existing OS/2 system by doing either of the following:

1. Enter "INSTALL.EXE" from an OS/2 command prompt (INSTALL.EXE is located in the \OS2\INSTALL directory - insure your path includes this directory (or execute the command from the \OS2\INSTALL directory).

   or

2. Double click your mouse on the "OS/2 System Folder" icon from the OS/2 desktop. Next open (double click) the "System Setup" folder and then double click the "Selective Install" icon.

   Selective Install presents a dialog for choosing System Configuration. Select the "SCSI Adapter Support" checkbox (along with other support your system requires) and press "OK" to continue. At the "Select SCSI Adapters" listbox choose the appropriate support for your host bus adapter:

If you have a	Choose
SyQuest High Performance 16-Bit Adapter	Adaptec 1520 support
Adaptec 152X Adapter	Adaptec 1520 support
Adaptec 154X Adapter	Adaptec 154X support

   Select "OK" and **Selective Install** will proceed with the installation.

   When the installation is complete, the system must be rebooted in order to use your SyQuest drive. Upon completion of this activity, SyQuest drives attached to the adapters are treated as OS/2 "floppy" non-partitioned drives.

NOTE: When installing OS/2 on a SyQuest drive, "Express Installation" formats the boot drive as an HPFS file system. SyQuest recommends using "Advanced Installation" and setting the file system to FAT.

Removable Drive Operation (OS/2 "Floppy" Mode)

The following section assumes that you did **not** install SyQuest SCSI Removability Software.

The drive letter assigned by OS/2 for your SyQuest drive will be the next drive letter after all fixed disk partitions. If you have a fixed disk with two partitions (C: and D:) the SyQuest drive will be assigned the drive letter E: Since this is not a fixed drive, the OS/2 utilities FDISK and FDISKPM will not recognize the drive.

To format a cartridge, insert the cartridge into the drive and use the OS/2 FORMAT or FORMATPM command. Since OS/2 treats the cartridge as a "large floppy", the cartridge will be formatted as a removable FAT file (no partition support).

OS/2 "large floppy" formatted cartridges freely interchange with other OS/2 systems and with DOS systems utilizing the latest level SyQuest software.

NOTE: OS/2 may "hang" if you boot with a partitioned cartridge in your SyQuest drive. Should this happen, remove the cartridge and reboot the system. To use a previously partitioned cartridge, you will need to delete all partitions on the cartridge on a DOS system and then format the cartridge on an OS/2 system. All data will be lost when you do this.

NOTE: When formatting a SyQuest cartridge as an OS/2 "floppy, you may see a message stating the capacity of the drive is 1.44 MBytes. Ignore this message

Installing SyQuest SCSI Removability Software (DOS Partitioned Cartridge support)

During the installation of SyQuest SCSI Removability software, the following modules shipped by IBM are replaced with SyQuest modified modules: (1) OS2DASD.DMD and (2) AHA152X.ADD. These modules are copied into the root directory and loaded before the versions shipped by OS/2 (located in /OS2 or /OS2/BOOT subdirectories. An additional module, SYQLOCK.FLT is installed.

To install SyQuest OS/2 removability software, select the OS/2 System Setup icon. After activating the icon, choose and activate the Device Driver Install icon. Insert the SyQuest SCSI Utility Diskette in diskette drive A: (or B:) and change the source from **A:** to **A:\OS2 (or B:\OS2)**. Select **SyQuest SCSI Removability Software** and proceed with the installation.

After rebooting your computer, you will need to run FDISK to partition the cartridge. From an OS/2 command prompt, enter FDISK. Use the tab key to select the top portion of screen that says "DISK 1 2". Use the right arrow key to select the SyQuest Drive. A non-partitioned drive will have FS Type of "FreeSpace". Use the tab key to highlight the disk information and depress the enter key. Select "Create Partition" and enter the size of the partition that you wish to create. Select the type of partition (typically primary) that you wish to create. Upon completion of partitioning, depress the F3 key and save and exit. NOTE: Depending upon the OS/2 version level, unformatted cartridges may not displayed by the WorkPlace Shell "Drives Window".

After rebooting, from an OS/2 command prompt use the command "FORMAT" to prepare your SyQuest partition using the FAT file system. (Note - The FORMATPM utility (launched from the "Drives Window") only supports the HPFS (High Performance File System) formatting of cartridges). After FORMAT is complete, the cartridge may be removed and interchanged with other DOS partitioned cartridges.

If you are attaching more than one SyQuest SCSI drive to your SCSI adapter, you will need to manually edit the CONFIG.SYS file located in the root directory to enable removability support. To do this, locate the

BASEDEV = SYQLOCK.FLT /UNIT:0

statement in your CONFIG.SYS. Use a text editor to append "**,1**" if you have two SyQuest drives. After modification, the statement should look as follows:

BASEDEV = SYQLOCK.FLT /UNIT:0,1

If using three SyQuest drives append "**,2**" to the statement (**/UNIT:0,1,2**).

Upon booting, the software reserves one drive letter for a primary partition and as many additional drive letters as there are logical partitions. If you will be interchanging cartridges that have variable number of partitions, you can force OS/2 2.1X or OS/2 3 to reserve additional drive letters by using the following syntax with the OS2DASD.DMD statement: "/NUMVOL: u, n" where u is the physical hard disk index (0 for the boot drive, 1 for the second drive, etc.) and n is the number of driver letters to reserve (maximum of 4). As an example, to reserve three drive letters for drive 1, change the OS2DASD.DMD statement in CONFIG.SYS from

BASEDEV=OS2DASD.DMD

to

BASEDEV=OS2DASD.DMD /NUMVOL:1,3

If you will be using both non-partitioned and partitioned cartridges on the same system, you will need to manually edit your CONFIG.SYS file and append a "/F" parameter to the OS2DASD.DMD statement. The new statement looks as follows:

BASEDEV=OS2DASD.DMD /F

The drive letter assigned for the "OS/2 Floppy" cartridge will be the next letter after all hard drive partitions have been assigned.

SyQuest Removability Software Operation (DOS Partitioned Cartridges)

SyQuest SCSI removability software allows the interchange of DOS FAT (File Allocation Table) partitioned cartridges between OS/2 2.1x, OS/2 3 systems and DOS/Windows NT systems. Interchange and removal of HPFS (High Performance File System) formatted cartridges is not supported, i.e. **do not intermix FAT and HPFS formatted partitions** on SyQuest cartridges that you wish to interchange. If SyQuest software detects an HPFS partition on a cartridge, it locks the drive and does not allow the cartridge to be removed until the computer is shutdown.

After installing the SyQuest SCSI Removability Software, you must reboot your system. Drive letter assignment of partitions follows OS/2 conventions. All primary partitions are assigned disk volume letters followed by logical partitions. As an example, suppose that your boot drive (drive 0) has a primary and a logical partition and you will be attaching two SyQuest drives. The first SyQuest drive has a cartridge with a primary and a logical partition and the second SyQuest drive has a cartridge with a primary and two logical partitions. Upon booting the system, the drive letter assignments will be C: for the primary partition of your boot drive, D: for the primary partition of the cartridge in the first SyQuest drive, E: for the primary partition of the cartridge in the second SyQuest drive, F: for the logical partition of the boot drive, G: for the logical partition of the cartridge in first SyQuest drive and H: and I: for the logical partitions of the cartridge in the second SyQuest drive.

CAUTION:

Before FORMATTING or erasing files on SyQuest cartridges, always verify that the drive letter you specify is correct. A simple way to verify that you are accessing the correct SyQuest cartridge partition is to run the OS/2 utility CHKDSK and verify that the SyQuest activity LED (Light Emitting Diode) is activated during execution of CHKDSK.

Removing a SyQuest Cartridge. SyQuest drives are brought up in a "Locked" condition when OS/2 boots. Depressing the eject button has no effect until a software "UNLOCK" command is sent to the drive. To "UNLOCK" the drive, double click the "OS/2 System" icon to launch the OS/2 System - Icon View Window. Double click the "Drives" icon to launch the "Drives - Icon View Window". When installed properly, the icon for SyQuest drives is a "floppy" icon with OS/2 2.1X and a removable hard drive icon with OS/2 3. Move the mouse cursor to the icon for the SyQuest drive and depress the right mouse button. Single click the "Unlock disk" menu item to send a software "UNLOCK" command to the SyQuest Drive. The drive will remain "Unlocked" until a software "LOCK" command is issued or until OS/2 accesses the drive. While in an "UNLOCKED" state, you may depress the "eject button" and remove the cartridge. After replacing one cartridge with another cartridge, move the mouse cursor to the icon representing the SyQuest drive and depress the right mouse button. Select the "Refresh now" menu item to have the WorkPlace Shell update with the correct information about files on the cartridge.

NOTE:

OS/2 FDISK and FDISKPM do not support the partitioning of cartridges that have previously been prepared as OS/2 "floppy" cartridge. Exit to DOS and use SyQuest DOS SCSI software to prepare (partition and DOS FAT file format) cartridges that were created as OS/2 "floppy" cartridges.

Installing a SyQuest Enhanced Parallel Port Adapter

To install a SyQuest SCSI drive attached to a SyQuest Enhanced Parallel Port Adapter Kit, select the OS/2 System Setup icon. After activating the icon choose and activate the Device Driver Install icon. Insert SyQuest SCSI Software Utility Diskette in diskette drive A: (or B:). and change the source from **A:** to **A:\OS2 (or B:\OS2)**. Select the **SyQuest Enhanced Parallel Port Kit Software** and proceed with the installation.

If you **did not** install SyQuest SCSI Removability Software, a SyQuest SCSI drive attached to the SyQuest Parallel Port Adapter Kit will be installed and supported as a removable OS/2 "floppy" drive. The drive letter assigned for the SyQuest drives will be the next drive letter after all fixed disk partitions. If you have a fixed disk with two partitions (C: and D:) a SyQuest SCSI drive attached to the parallel port adapter will be assigned the drive letter E:. Since the drive is not a fixed drive, the OS/2 utilities FDISK and FDISKPM do not recognize the drive.

If you **did** install SyQuest SCSI Removability Software, the drive will support the interchange of partitioned FAT formatted cartridges and/or "OS/2 floppy" cartridges. (Please refer to the previous section for details.)

NOTE:

SyQuest software does not "Auto Lock" cartridges attached to Parallel Port Adapter Kits. After interchanging a cartridge: (1) detect the icon for the drive, (2) click the right mouse button, and (3) lock the drive.

1. If the SyQuest drives does not appear to work correctly, verify that the OS/2 **Selective Install** correctly modified the CONFIG.SYS file. The following statement should have been added to CONFIG.SYS:

   BASEDEV=AHA152X.ADD for an Adaptec 1515 or 152X Adapter
   BASEDEV=AHA154X.ADD for an Adaptec 1540 Adapter

   In addition, the appropriate file (e.g. AHA152X.ADD) should have been copied to the \OS2 directory.

2. Diagnostic information about the Host Bus Adapter and the attached SyQuest drive unit can be displayed using the "/V" option. Edit CONFIG.SYS and add "/V" (Verbose) to the end of the appropriate BASEDEV=statement. For example, for an Adaptec 152X adapter, the diagnostic line would be

   BASEDEV=AHA152X.ADD /V

3. If you are using the SyQuest drive as a fixed disk and while accessing the drive get a "SYS0015" error, SYQLOCK.FLT probably loaded incorrectly. Verify that "n" in the SYQLOCK.FLT statement equals the relative position of the removable drive on the SCSI daisy chain.

   BASEDEV=SYQLOCK.FLT /UNIT:n

   statement in CONFIG.SYS. ("n" in "/UNIT:n" must equal the sequential number of the removable SCSI drive - 0 for the first drive, 1 for the second, etc. Removable drives may be either SyQuest drives or magneto optical drives.)

4. If the icon for the SyQuest drive does not appear in the "Drives - Icon View" window, the OS/2 WorkPlace Shell failed to detect valid media in the drive. If using the cartridge as a "OS/2 floppy", format the cartridge. If using SyQuest SCSI removability software, prepare the cartridge under DOS and insert the prepared cartridge in the SyQuest drive before booting the system.

5. If a message stating that SYQLOCK.FLT was unable to find all drives appears during the boot process do the following:

   a. Verify that the cable from the SCSI adapter to the SyQuest drive is fully seated and connected.

   b. Verify that the SyQuest drive is powered on and contains a partitioned FAT file formatted SyQuest cartridge.

   c. Verify the order of the following statements in your CONFIG.SYS file. OS2DASD.DMD should be first, followed by SYQLOCK.FLT. AHA152X.ADD (or AHA154X.ADD) should be last.

   d. Verify the syntax of the OS2DASD.DMD statement (See this chapter for the syntax).

   e. Verify the syntax for the SYQLOCK.FLT statement. The first removable drive is denoted by "/UNIT:0. Additional removable drives are denoted by ",1", ",2" , etc.

6. If you are using a SyQuest Parallel Port Kit and the system hangs or traps after installing the device driver, do the following:

   a. Disconnect the cable from the parallel port and reboot your computer.

   b. After the computer boots, edit the CONFIG.SYS file and append "**/DE**" to the **BASEDEV=EPSA.ADD** statement. The new statement should read:

      BASEDEV=EPSA.ADD /DE

Chapter 5 • Windows NT

Overview

Windows NT software device drivers are available for the following SyDOS Host Bus Adapters:

Host Bus Adapter	Device Driver
Adaptec 1515 Adapter	SPARROW.SYS
Adaptec 152X Adapter	SPARROW.SYS
Adaptec 154X Host Bus Adapter	AHA154X.SYS
Seagate ST01	ST01SCSI.SYS

All of the drivers support removability and FAT interchange between Windows NT and DOS. (Any cartridge formatted under DOS by SyQuest or DOS format utilities can be used under Windows NT. Any cartridge formatted by Windows NT can be used under DOS.) However, Windows NT recognizes only the first partition of a multiple partitioned cartridge. See the Readme file in the WinNT directory for the latest information about the drivers.

Installing SyQuest Device Support Software

Device drivers for the Adaptec 1515, Adaptec 152X and Adaptec 1540 SCSI adapters are included in the Windows NT Operating System. Drivers for the Seagate ST01 SCSI adapter are included in the WinNT subdirectory on the SyQuest SCSI Utility Diskette.

Follow the instructions in your hardware manual to physically install your SyQuest Host Bus Adapter and SyQuest drive. Be sure to set the Host Bus Adapter BIOS to disabled state. (Unless you will boot from the drive).

Select the Windows NT Setup icon. Under the Options menu, choose **Add/Remove** SCSI adapters. Select the **Add** button.

For an Adaptec 1515 Adapter, select the SPARROW.SYS driver
For an Adaptec 152X Adapter, select the SPARROW.SYS driver.
For an Adaptec 1540 Adapter, select AHA154X.SYS.

For the Seagate ST01 Adapter do the following:

1. Choose "Other (Requires a disk from a hardware manufacturer)" option. Follow the instructions on the screen. You will be asked to insert a diskette. Insert the SyQuest SCSI Utility Diskette in the A: drive and type:

   A:\WINNT

2. Next choose OK.

3. In the "Select OEM Option" dialog box, choose "Driver for ST01 SCSI HBA from SyQuest Technology" for a Seagate ST01 adapter.

   When driver installation is complete, choose the Continue button to return to Windows NT Setup.

4. To Remove a driver for an adapter do the following:

   Under Windows NT Setup, select the **Add/Remove** dialog box and select the SCSI device that you desire to remove. (SPARROW.SYS for an Adaptec 1515 or 152X Adapter, AHA154X.SYS for an Adaptec 154X Adapter or ST01SCSI.SYS for a Seagate ST01).

   Choose the **Remove** button, then the **Continue** button to return to Windows NT Setup.

NOTE: Your computer must be re-booted for any change in the device driver to take effect.

NOTE: You must partition your SyQuest cartridge under DOS before using the cartridge on a Windows NT system

Appendix A • MS-DOS 6.X

MS-DOS 6.0/6.2X introduced several new functions. Follow the procedures listed below when doing any of the following:

1. Upgrading to MS-DOS 6.X - Before upgrading to MS-DOS 6.X, you must disable the SyQuest device driver. Use any text editor (for example, **edlin** or **edit)** to insert "REM" in front of the device driver statement in your CONFIG.SYS file, Change the line in your CONFIG.SYS file:

   FROM: DEVICE=SQDRIVER.SYS
   TO: REM DEVICE=SQDRIVER.SYS

   After upgrading to DOS 6.X, use a text editor to remove the "REM" from in front of the device driver statement.

2. Using DBLSPACE - DBLSPACE is a data compression utility built into MS-DOS 6.0 and 6.2, DRVSPACE is the utility built into 6.22. Two drive letters are created for compressed drives:
   A. an **Uncompressed HOST** drive and
   B. a **Compressed Volume File.**

   If your system is using an ASPI manager, the ASPI manager must be loaded before SQDRIVER.SYS and SQDRIVER.SYS must be loaded before DBLSPACE/DRVSPACE. Ensure the DEVICE=ASPI Manager statement is before the DEVICE=SQDRIVER.SYS statement in the CONFIG.SYS file. Also, ensure that the DEVICE=SQDRIVER.SYS statement is entered before the DEVICE=DBLSPACE/DRVSPACE statement in the CONFIG.SYS file.

To use a MS-DOS 6.0 DBLSPACE Volume, you must first enter a **MOUNT** command as shown below:

DBLSPACE /MOUNT X:

where **X** is the drive letter associated with the compressed volume. Before removing the volume you must issue an **UNMOUNT** command:

DBLSPACE /UNMOUNT X:

where **X** is the drive letter associated with the compressed volume.

IMPORTANT: ***DO NOT REMOVE A CARTRIDGE UNTIL ALL VOLUMES ON THAT CARTRIDGE HAVE BEEN UNMOUNTED. FAILURE TO DO SO WILL RESULT IN DATA LOSS.***

MS-DOS 6.2X "automatically" mounts and unmounts volumes installed as "NEW" or "DUMMY" Volumes. However, if the volume is "TAKEN OVER" (refer to the installation message displayed when the device driver loads during boot time) by the SyQuest device driver, you must issue a MS-DOS 6.2X **UNMOUNT** or **MOUNT** command before or after changing a cartridge.

DBLSPACE/DRVSPACE requires that a bootable drive be "fixed". Use the SQSHELL menu or SyQuest Windows Fixed option to set the drive to "fixed" before DBLSPACEing (or DRVSPACEing) the drive. Whenever a SyQuest cartridge is used as the boot drive (**C:** drive), the special SyQuest provided command, **UNMOUNTC**, (found on your installation diskette and copied to the SyQuest Software directory during installation) must be issued prior to removing the cartridge (MS-DOS does not allow the boot drive to be **UNMOUNT**ed.) All bootable DBLSPACE/DRVSPACE cartridges must have a copy of DBLSPACE.EXE/DRVSPACE.EXE in the HOST volume of the **C:** drive. You must enter a **DBLSPACE /MOUNT C:** (or **DRVSPACE /MOUNT C:**)command prior to using a new compressed bootable cartridge.

3. Using SMARTDRV.EXE - SMARTDRV.EXE is a caching utility supported by DOS 6.X. SMARTDRV.EXE significantly improves system performance. The default mode of operation of SMARTDRV.EXE with DBLSPACE/DRVSPACE is read only caching. If you are using DBLSPACE.EXE/DRVSPACE and have drives that were "Taken Over" (see item 2 above) by the SyQuest device driver, all DBLSPACEd/DRVSPACEd SyQuest drives must be UNMOUNTed before starting SMARTDRV.EXE and then manually MOUNTed. All drives must be manually UNMOUNTed before removing a cartridge.

   Write cached data must be physically written to the cartridge before a cartridge is removed! FAILURE TO DO SO RESULTS IN LOST OR CORRUPTED DATA. Should you decide to use SMARTDRV.EXE with write caching enabled, UNMOUNT all volumes and disable write caching before removing the cartridge. Disable write caching by using the following command:

   SMARTDRV X

   where **X** is the **HOST** drive letter associated with the cartridge. As a general rule the slight increase in performance gained with write caching enabled is offset by the prevention of data loss that happens during accidental removal of a cartridge or a power loss.

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Appendix B • SQDRIVER.SYS, SQEPP.SYS and EPSA.ADD Syntax

SQDRIVER.SYS

The syntax for the DEVICE statement is:

DEVICE=[path]SQDRIVER.SYS [/d] [/l] [/n] [/q] [/+s] [/-s] [/t][/x] [/DRIVEx:yyy]

Note that in the command line above, the "[" and "]" characters should not be typed (they indicate that these parameters are optional). Driver command line parameters are used for special situations. You should first try to install the DEVICE statement without any parameters.

The following list briefly describes the parameters:

/d This option tells the driver to display debug messages while loading.

/l This option tells the driver to Auto Lock all SCSI SyQuest drives. All SyQuest drives with valid media will be automatically locked when the driver installs. You must "UNLOCK" the cartridge before you can change it. The drive will be re-locked as soon as the media is accessed.

/n "n" is a digit that indicates the number of volumes to reserve for a device at boot time if no volumes were found at boot time. The default is to reserve 1 for DOS versions 3.31 and above, and to reserve more for DOS versions 3.0 through 3.30 depending on the drive capacity.

/q This option tells the driver to attempt to support non-SyQuest drives.

+s "s" stands for a digit, 0 - 9, that instructs the driver to specifically support the partitions on that device. To specifically support the first device in the system, use "+0." To support the third, use "+2," etc. Note that the device specified must be supported by the Adapter's BIOS.

-s "s" stands for a digit, 0 - 9, that instructs the driver to specifically NOT support the partitions on that device. To not support the third device, use "-2". Note that the device specified must be supported by the Adapter's BIOS. This option must be used if you have a Always Adapter and the driver is mistakenly trying to install your CD ROM drive.

/t This parameter forces the drive to never issue a request that crosses a track boundary. This may be necessary for DR-DOS 6.0 and if you also use some versions of DM device drivers.

/x For Zenith DOS 3.3 Plus only. Forces the driver to handle large partitions like Compaq DOS 3.31.

/DRIVEx:yyy This parameter instructs the driver to take over drive letters that were assigned to other volumes. "x" stands for physical device number (usually 0, or 1), and yyy if the volume letters you want assigned to the physical device. An example would be DRIVE1:EF. This is intended only for Zenith DOS 3.21, which automatically reserves four volumes when DOS installs. It allows you to use one of the reserved drive letters.

SQEPP.SYS

DEVICE=[Path]\SQEPP.SYS /Rxx /Wx /Mxy [/DA] [/DE] [/DI] [/DP] [/FB] [/FE] [/FP] [/Hx] [/Ix] [/Zx]

In the statement above, the brackets "[" and "]" are not to be typed; they show parameters that are optional. During installation, the port is tested to automatically determine the fastest, error free setting for these parameters. The following is a brief description of each parameter:

/Rxx Tells the device driver to use a read mode denoted by the following settings: R0 for nibble (4 bit) fast, R1 for nibble normal, R2 for nibble slow, R3 for unidirectional fast, R4 for unidirectional normal, R5 for unidirectional slow, R6 for Toshiba fast, R7 for Toshiba normal, R8 for PS/2 fast, R9 for PS/2 normal and R10 for EPP normal and R11 for EPP fast.

/Wx Tells the device driver to use a write mode denoted by the following settings: W0 for write fast, W1 for write normal, W2 for write slow and W3 for EPP normal and W4 for EPP fast.

/Mxy Tells the device driver which access mode to use. x denotes the SCSI ID number (8 for all devices on the SCSI chain). y denotes the access mode where

Value of y	Read	Write
0	Blind	Blind
1	Blind	Handshake
2	Handshake	Blind
3	Handshake	Handshake

/DA Disable Autodetect mode. Force the device driver to use 4 bit read and write slow mode.

/DE Tells the device driver to not check for EPP mode while performance tuning the system.

/DI Tells the device driver to disable interrupts

/DP Tells the device driver to disable PS/2 mode (8 bit bidirectional)

/FB Tell the device driver to attempt to enable bi-directional operation for EISA some chip sets (Do not use with ISA systems)

/FE Tells the device driver to force EPP Mode.

/FP Tells the device driver to force PS/2 mode (8 bit bi-directional)

/Hx Tells the device driver which adapter to use. The default is 0.

/Ix Tells the device driver to use interrupt 5 or 7 (x may be 5 or 7).

/Zx Tells the adapter to set the number of wait states when running in EPP mode. The default is 2. (valid values of x are from 0 to 9)

EPSA.ADD (OS/2 2.1)

DEVICE=[Path]\EPSA.ADD [/Rxx] [/Wx] [/DA] [/Mxy] [/DE] [/DI] [/DP] [/DR] [/FE] [/Hx] [/MCA] [/IX] [/Zx]

In the statement above, the brackets "[" and "]" are not to be typed; they show parameters that are optional. The following is a brief description of each parameter:

/Rxx Tells the device driver to use a read mode denoted by the following settings: R0 for nibble (4 bit) fast, R1 for nibble normal, R2 for nibble slow, R3 for unidirectional fast, R4 for unidirectional normal, R5 for unidirectional slow, R6 for Toshiba fast, R7 for Toshiba normal, R8 for PS/2 fast, R9 for PS/2 normal, R10 for EPP normal and R11 for EPP fast.

/Wy Tells the device driver to use a write mode denoted by the following settings: W0 for write fast, W1 for write normal, W2 for write slow and W3 for EPP normal and W4 for EPP fast.

/Mxy Tells the device driver which access mode to use. x denotes the SCSI ID number (8 for all devices on the SCSI chain). y denotes the access mode where

Value of y	Read	Write
0	Blind	Blind
1	Blind	Handshake
2	Handshake	Blind
3	Handshake	Handshake

/DA Disable Autodetect mode. Force the device driver to use 4 bit read and write slow mode.

/DE Tells the device driver to disable EPP (Enhanced Parallel Port) mode.

/DI Tells the device driver to disable interrupts

/DP Tells the device driver to disable PS/2 mode (8 bit bidirectional)

/FE Tells the device driver to force EPP Mode.

/Hx Tells the device driver which adapter use. The default is 0.

/Ix Tells the device driver to use interrupt 5 or 7 (x may be 5 or 7).

/MCA Tells the device driver to load on a MicroChannel Architecture computer

/Zx Tells the adapter to set the number of wait states when running in EPP mode. The default is 2. (valid values of x are from 0 to 9)

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Appendix C • ASPI Managers and Bootable Cartridges

Overview

SyQuest SCSI Utility Diskettes automatically support the installation of SyQuest SCSI Removable Cartridge Disk Drives connected to SyQuest SCSI Adapters as boot drives. The BIOS for the SCSI Adapter card **must** be enabled for the drive to be bootable. (See your Hardware SCSI Adapter Manual for instructions on how to enable BIOS). Parallel port attached drives **cannot** be made bootable.

Many SCSI hardware adapter manufacturers provide an ASPI (Advanced SCSI Programming Interface) Manager for their adapter card. ASPI Managers provide a common interface to the SyQuest device driver (SQDRIVER.SYS) so that all SCSI Adapter hardware specific code is contained within the ASPI Manager and all SyQuest Removable Cartridge Disk Drive specific code resides within SQDRIVER.SYS. (SQDRIVER.SYS is the software that provides SyQuest Cartridge removability and DOS interchange support.) SCSI Adapters that provide a fully compliant ASPI Manager interface fully support SyQuest cartridge removability and interchange. An example of an ASPI Managers that supports SyQuest removability and interchange standards is ASPI2DOS (included in "SyQuest SCSI Utility Diskette") for the Adaptec 1515 and 152X series of Adapters.

Modifications were made to the BIOS of several SCSI Adapter Cards to support SQDRIVER.SYS. Examples of these SCSI Adapters are the ST01 (SyQuest/SyDOS Standard Performance Adapter) and the Adaptec 1540 card with BIOS revision level 3.34SQ BIOS. These cards do not require ASPI Managers.

Installing a SyQuest Drive with a SCSI Adapter that supports an ASPI Manager

The following information is provided for installing a SyQuest Removable Cartridge Disk Drive with a non SyQuest SCSI Adapter utilizing an ASPI Manager.

ASPI Managers must always be installed before SQDRIVER.SYS. DOS installs device drivers in the order in which they appear in the CONFIG.SYS file on the boot device. This means that the DEVICE=ASPI Manager statement in CONFIG.SYS must always come before the DEVICE=SQDRIVER.SYS statement. Additionally, for MS-DOS 6.0 and 6.2 systems, the ASPI Manager and SQDRIVER.SYS statements must always come before a DBLSPACE/DRVSPACE statement.

By convention, all SyQuest installation and setup software installs (default mode) to a \SYQUEST subdirectory on the boot device (A: diskette or C: hard drive). All ASPI Managers are placed in the \SYQASPI subdirectory under \SYQUEST directory. By following these conventions, you can manually install other ASPI managers so that they will be recognized by SyQuest cartridge preparation software (SQPREP.EXE).

SQPREP.EXE is the program that prepares (partitions and formats) SyQuest cartridges. SQPREP.EXE is contained (uncompressed) on THE "SyQuest SCSI Utility Diskette." This utility determines the boot device (A: diskette or C: drive) and searches for the directory in which SQDRIVER.SYS resides. (The default subdirectory for SQDRIVER.SYS is \SYQUEST\SCSI). It looks for a \SYQASPI subdirectory in the directory above SQDRIVER.SYS to find the ASPI Manager for the system. If it finds an ASPI Manager in the \SYQASPI subdirectory, it copies the ASPI Manager to cartridges that are to be made bootable. By following the convention of always installing an ASPI manager in the \SYQASPI subdirectory, SQPREP.EXE can create bootable cartridges.

The following example shows how to use SyQuest SCSI Utility Diskettes to install an an Adaptec 1740 SCSI Adapter to fully support SyQuest removability and interchange and to enable SQPREP.EXE to create bootable SyQuest cartridges. The ASPI Manager for the Adaptec 1740 card is ASPIEDOS.SYS. In the following example, replace ASPIEDOS.SYS with the ASPI manager for the SCSI Adapter that you are using. This installation assumes that you already have a C: drive installed.

1. Insert the SyQuest SCSI Utility Diskette into a diskette drive, type the diskette drive letter, A: (or B:) <Enter> key and type "Install" <Enter> key.

2. At the "SyQuest Device Selections" menu select "SCSI Drives"

3. At the "SCSI Adapter Software Selection" menu select "all others" .

4. Complete the installation. It is assumed in this example that the installation directory was defaulted to C:\SYQUEST. If you did not install to C:\SYQUEST, replace C:\SYQUEST with the installation directory that you did choose.

5. After completing the installation you will need to manually update your system files as follows:

   a. Create a new subdirectory, SYQASPI, under the SyQuest directory. To do this, enter the following command:

   MD C:\SYQUEST\SYQASPI

   b. Copy the ASPI Manager to the SYQASPI subdirectory. Assuming you have a copy of the ASPI Manager, ASPIEDOS.SYS, on the root directory of a diskette that you insert into the A: diskette drive, you would enter the following command:

   COPY A:ASPIEDOS.SYS C:\SYQUEST\SYQASPI

(If ASPIEDOS.SYS does not reside on the root directory of the A: diskette, replace "A:ASPIEDOS.SYS" with the correct Drive:\Full Path Name containing ASPIEDOS.SYS file.)

c. Edit your CONFIG.SYS file to include a device statement for the ASPI Manager. The ASPI Manager statement must come before the SQDRIVER.SYS statement and must come before any DBLSPACE/DRVSPACE Statements. To insure that these conditions are met, find the DEVICE=[PATH]\SQDRIVER.SYS statement in your CONFIG.SYS file and insert the ASPI Manager statement immediately above it. The new lines would look like the following:

DEVICE=C:\SYQUEST\SYQASPI\ASPIEDOS.SYS
DEVICE=C:\SYQUEST\SCSI\SQDRIVER.SYS

6. Reboot your system. Upon competition of these activities, SQPREP will create bootable cartridges.

Drive Letter Assignments

DOS assigns drive letters based on the sequence in which the BIOS enabled primary drives are found, followed by logical drives. The following example assumes that you have an IDE adapter card supporting a hardfile with a primary partition (IDE_P1) and an additional logical partition (IDE_L1) and a SCSI adapter with two drives daisy chained to the SCSI adapter each with a primary partition and a secondary partition (SCSI1_P1, SCSI1_L1, SCSI2_P1, SCSI2_L1). Drive letter assignments change depending on whether the BIOS is enabled on the SCSI adapter card. Noted below are the DOS drive letter assigments with and without the SCSI Adapter BIOS enabled (the BIOS on SCSI adapter in this example only supports the first SCSI drive).

Drive	Without SCSI BIOS Enabled	With SCSI BIOS Enabled
IDE_P1	C:	C:
IDE_L1	D:	E:
SCSI1_P1	E:	D:
SCSI1_L1	F:	F:
SCSI2_P1	G:	G:
SCSI2_L1	H:	H:

Partition cartridges as single primary partition to minimize disruption caused by drive letter changes.

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